

Note.—Since the above article was admitted for publication, a paper has been read by Mr. Carroll Miller, of Newark, before the New England Association of Gas Engineers,¹ giving in detail results of experiments on purification conducted with this apparatus. The employment of starch paste solution instead of mercury in taking the sample, is perhaps an advantage, as it is easier to handle and does away with the necessity in very exact work for drying out the burette after each determination. In using starch paste solution the burette is previously filled with the same, and the sample of gas taken by allowing the liquid to run out down to the 100 cc. mark, having previously purged the connecting hose with the gas to be analyzed. A question as to the accuracy of the apparatus brought from Mr. Miller the opinion that 15 grains of hydrogen sulphide per hundred feet of gas could escape detection. Before the apparatus was put on the market it was tested and found to be susceptible to as small a quantity as 3 grains per one hundred feet.

ON TRITOLYLCHLORMETHANE.

BY M. GOMBERG AND O. W. VOFDISCH.

Received January 12 1901.

ONE of us² published recently a method for the preparation of triphenylchlormethane. We have tried the same reaction on toluene and find that the corresponding tritolyl compound can be obtained in this way. As the action of aluminum chloride upon a mixture of carbon tetrachloride and toluene was rather energetic we added, as is customary, a large excess of carbon disulphide in order to lower as much as possible the temperature of the reaction and to prevent the splitting off of the methyl groups. The yield of the tritolylchloride was in this way increased, but is still far from satisfactory. The compound was purified similarly to the triphenyl derivative. Sixty-two grams of carbon tetrachloride, 100 grams toluene, 150 cc. carbon disulphide, and 85 grams aluminum chloride, give about 22 grams of the chloride derivative, as we found from ten trials of this reaction.

	Calculated for (C ₆ H ₄ CH ₃) ₃ CCl.	Found.	
		I.	II.
Chlorine	11.08	9.93	10.85

¹ See *American Gas Light Journal*, 74, No. 9, p. 325.

² This Journal, 22, 752.

On boiling with alcohol the tritolychlormethane gives the ethoxy compound, which can be easily purified by recrystallization from alcohol. Melting-point, 105° C.

	Calculated for (C ₆ H ₄ CH ₂) ₃ C.OC ₂ H ₅ .	Found.
Carbon	87.27	86.63
Hydrogen.....	7.88	7.66

On boiling with water the carbinol is formed. This work will be continued, and the action of metals upon the halogen compound will be studied.

UNIVERSITY OF MICHIGAN,
CHEMICAL LABORATORY,
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REVIEW.

THE FOURTH INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY.¹

The grand amphitheater of the Sorbonne has seen many notable assemblages of scientific men, but probably the most distinguished body of chemists that its walls ever enclosed was that which met on the 23rd of July, 1900, to assist in the opening of the Fourth International Congress of Applied Chemistry.

This organization of chemists had its real origin during the World's Fair, when the chemists of the United States invited their professional brethren from all parts of the world to meet them in an international congress, which convened in Chicago, in 1893, under the auspices of the American Chemical Society, and the chemical section of the American Association for the Advancement of Science. In the address of welcome to this congress, I said:

"Chemistry is truly cosmopolitan. There is no one country that can claim it entirely, either by birth or adoption, Wurtz to the contrary notwithstanding. It is therefore entirely fit and proper that the chemists of all nations should now and then meet on common terms for the sake of mutually profiting by the advances and discoveries that each has made. I believe that there will be brought before the present congress a proposal for the regular triennial meeting of the chemists of the world, after the plan which has been followed so successfully by our brethren, the geologists and physicians. Were the object of such a congress only to listen to papers and addresses pertaining to the progress and development of our science, it might well be asked

¹ Read before the Northeastern Section of the American Chemical Society, January 17, 1901.